

What is claimed is:

1. A method for producing a film with through-holes using a film producing apparatus comprising:

a pair of stretching rollers which sandwich a film therebetween and stretch said film in at least one direction; and

a pair of punching rollers at least one of which has projections formed on an outer surface thereof, which sandwich said film therebetween and punch through-holes in said film; and

said stretching rollers and said punching rollers are disposed so that said film stretched by said stretching rollers are fed to said punching rollers;

said method comprising:

stretching said film by means of said stretching rollers; and
punching through-holes in said film.

2. The method according to claim 1, wherein said film is made of shape memory resin.

3. The method according to claim 2, wherein in said stretching, said film is heated to a temperature above a shape providing temperature of said shape memory resin.

4. The method according to claim 2, wherein in said punching, said film is heated to a temperature above a glass transition temperature of said shape memory resin.

5. The method according to claim 2, further comprising cooling said film below a shape providing temperature of said shape memory resin, after said stretching.

6. The method according to claim 1, wherein said glass transition temperature of said shape memory resin is below said shape providing temperature, and wherein said punching comprises:

punching through-holes in said unpunched shape memory resin film while heating said shape memory resin film to a temperature above a glass transition temperature but below said shape providing temperature of said shape memory resin.

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